Brightwater Treatment Facility
Executive Advisory Committee
Meeting Eighteen
Northshore Utility District
July 11, 2002

Meeting Report

Committee Members
Angela Amundson
Bob Bandarra
Deborah Chase
Kevin Fitzpatrick
Gary Haakenson
Peter Hahn
Corinne Hensley
Doug Jacobson
Mike Miller
Paul McIntyre
Joyce Nichols (for Scott Jepsen)
Tom Ostrom
Bob Schillberg (for Peter Block)
Bill Vlcek

King County Staff
Debra Ross
Christie True
Erika Peterson
Stan Hummel

Consultant Team
Jay Witherspoon, CH2M Hill
Eleanor Allen, CH2M Hill
Steve Van Slyke, Puget Sound Clean Air Agency
Yvonne Kraus, Norton-Arnold & Company
Margaret Norton-Arnold, Norton-Arnold & Company

Observers:
Diane Thompson
Jim Orvis
Katherine Batts

Facilitator: Margaret Norton-Arnold

Meeting Highlights

The July 11 meeting of the Brightwater Executive Advisory Committee focused primarily on odor control issues. The Committee heard a presentation about odor control options and issues, the technologies under consideration, how the two potential sites are being modeled and evaluated.

In their discussion after the presentations EAC members provided the following advice to King County:

- Share information to instill public confidence that you are using sound modeling techniques for each of the sites, and that state-of-the-art technologies will be used in the design of the plant.
- Make sure to indicate that the same standards for odor control you are applying to the plant will also be applied to the conveyance system.
- The odor control standards need to be more clearly explained. It makes more sense to describe the removal percentages of certain compounds, e.g. "we will remove 97% of the SO2 odors in the system, rather than use dilution factors.
- Provide the public with simple information that shows where in the system odors are generated, what compounds will be treated, and how they will be removed from the air.
- Be proactive about maintaining the entire system to avoid odor control problems down the road. Explain how you will monitor operations so that problems can be addressed before complaints are generated.
- Look into compliance issues in obtaining air quality permits. Even though Brightwater standards will be higher and probably will not constitute a nuisance violation from the Puget Sound Clean Air Agency, be prepared and clear on how you will address a nuisance violation.
- Conduct and share the data from baseline air quality studies. This will provide the public with information on existing air quality at each site.
- Redundancy needs to be built into every part of the system. The system must be designed for worst case peak conditions, including maintenance and equipment replacement operations.
- Set aside a budgetary retainer that can be drawn upon if any part of odor control system doesn't work as well as it should.
- The backup power generators should be sized to be able to take over the odor control system if necessary.
- Make sure to address air circulation conditions at each site to ensure that the odor control mechanisms fit the needs of the location.
- Make a list of local industries that generate odor and use similar odor control systems. These don't necessarily have to be wastewater treatment plants. Local examples might reassure people that these technologies really do work.

- Admit that this is a very difficult subject to convince the public about. Say you are going to use the best technology possible, stick to that commitment, and don't worry if everyone doesn't believe you; they aren't going to no matter what you do.

Members also provided feedback related to the EIS scoping meetings that were held in June. Several members commented that the information provided was well-presented and complete. They also noted that meeting staff were responsive to attendees and provided clear answers to questions. The suggestion was made that more time be devoted to graphic portrayals of the conveyance system, including pump stations and portals. They are difficult concepts for the public to grasp, and more graphics would be helpful to explain this portion of the Brightwater system.

Presentation: Air Quality Permitting Issues

Steve Van Slyke, Puget Sound Clean Air Agency

Steve provided background on the Puget Sound Clean Air Agency (PSCAA) and its role in the Brightwater permitting process. All of the members attending the meeting received a copy of Steve's PowerPoint presentation.

In brief, Steve explained that the PSCAA enforces laws, policies, and standards set by the EPA, issues permits, monitors air quality and protects human health. PSCAA will be involved in reviewing permits for Brightwater, including:

- Pre-construction permits, which set emission criteria, identify emission control, and evaluate air quality impacts off-site.
- Construction permits, which approve emission limits and the pollutant reduction/odor control technology that will be used at the plant.

PSCAA monitors other air pollutants. Odor, which can be complex and subjective, is defined as a "nuisance" category. As such, approval permits are not written directly for odor. However, if the plant does generate odors and complaints are filed with the PSCAA, the PSCAA will issue a notice of violation, and the plant operators must take all appropriate steps to correct the problem.

Presentation: Odor Control Commitment

Stan Hummel, King County Department of Natural Resources and Parks.

Stan Hummel is the King County engineering manager for the final engineering design and construction of the Brightwater treatment plant. Stan reiterated the County's commitment to having the highest possible standards, and odor control technologies, in play throughout the Brightwater system.

Presentation: Potential Odor Control Technologies
Jay Witherspoon, CH2M Hill

Jay Witherspoon is the odor control expert for the Brightwater project. His PowerPoint presentation was provided to all members at the meeting. Jay further reiterated the County's commitment to employ an odor control system that goes well beyond normal control standards. Compared with other systems around the nation, Brightwater's will be seven times more stringent.

A committee member asked where in the system the addition of the odor-reducing hypochlorite would occur. Hypochlorite can be added at a number of places throughout the system, including pump stations. Neither liquid nor gaseous chlorine will be used for this purpose.

In response to another question, Jay commented that each of the sites under consideration has a different wind pattern. The Route 9 site, for example, often experiences inversions, so the odor control devices would need to be designed to accommodate for this.

One member asked if the addition of chemicals to control odor would leave toxic residues in the biosolids. Jay explained that when these chemicals are put into the system there is enough water to dilute them so that they do not leave residues in either the biosolids or treated wastewater.

There was also a question about the use of biofilters, which are beds of soil like materials that contain microorganisms that "eat" odors. They can be very effective in treating odors, and can fit well into a landscape. However, they require a large area, and are more likely to be used at the Route 9 site than at the Unocal site.

Questions were asked about the cost of such an extensive odor control system. Project estimates are currently being developed, but it is anticipated that the Brightwater odor control system will cost 30-40 million more than a more conventional system.

Presentation
Christie True, King County Department of Natural Resources

Christie informed members that King County Executive Ron Sims and Snohomish County Executive Bob Drewel would like to meet with the EAC, and a special meeting has been scheduled for August 13. King County Executive Sims has decided to identify a preferred alternative in the Draft EIS and he wants to share his thoughts on this with the EAC. She noted that this does not mean that a final decision has been made. The EIS will continue to fully evaluate both plant sites and several conveyance corridors that have been identified to date. A final decision will not be made until after the Final EIS is completed in mid 2003.

Christie also discussed why King County decided to pursue design-build-bid as the contracting method for the Brightwater plant. She noted that King County evaluated several project delivery methods; the design-bid-build method makes most sense based on this evaluation. A handout summarizing the evaluation process was distributed.

Christie noted that it might be possible to construct segments of the conveyance system utilizing a design-build method; the County will explore these possibilities.

One member asked about the estimated time frame for construction of the treatment facility and the conveyance system. Christie responded that the entire system will be completed at the same time (2010), but construction will be phased in on the various segments of the system.

Members suggested that the County adopt some of the same incentives used by the WSDOT, which encourage and reward contractors when they complete.

Public Comment:

In response to a question from the public, Stan Hummel stated that the additional funds necessary for extensive odor control would not come of the mitigation budget.

Another observer asked about the generation and sale of reclaimed water and whether the money generated from these sales could be used to finance the construction of Brightwater, and asked if this water is pumped through different pipes than the wastewater influent and effluent. Stan Hummel responded by saying that the County is looking for all opportunities to use reclaimed water from the facility; reclaimed water would be conveyed through 'purple pipe', which is designed specifically for reclaimed water; this pipeline could be constructed as a part of the overall conveyance system. Reclaimed water can be used for urban irrigation, such as sports fields, cemetery irrigation, and industrial processes.

Money generated from the sale of reclaimed water, if sufficient demand and markets exist, could be used to defray the expense of the facilities.

Next Steps

The next EAC meeting will be held on Wednesday August 13th, 1:00 p.m., at the Northshore Utility District. The meeting is expected to adjourn at 2:30.

EAC members are urged to attend the conveyance meetings, which are scheduled from 7:00 – 9:00 p.m. on the following dates and locations:

Thursday, July 25th
The Shoreline Library
345 NE 175th in Shoreline

Tuesday, July 30th
Mountlake Terrace Library
23300 58th Avenue West in
Mountlake Terrace

Thursday, August 1st
Lake Forest Park Civic Club
17301 Beach Drive NE in Lake Forest Park

Wednesday, September 4th
The Courtyard Hall at Country Village
23732 Bothell-Everett Hwy, Suite G in Bothell

Wednesday, September 18th
Northshore Utility District
6830 NE 185th St. in Kenmore